

UNITED STATES DEPARTMENT OF THE INTERIOR

BUREAU OF INDIAN AFFAIRS
NATIONAL GEOSPATIAL RESOURCE CENTER
1011 INDIAN SCHOOL ROAD NW, SUITE 177
ALBUQUERQUE, NM 87104

REGISTRATION (505) 563-5355 or 877-293-9494 (NGRC Help Desk) FAX (505) 563-5359 http://ngrc.indianaffairs.gov. (BIA intranet) OR

http://www.bia.gov/WhatWeDo/ServiceOverview/Geospatial/index.htm



2011 TRAINING SCHEDULE

Version: 15 April 2011

The National Geospatial Resource Center (NGRC) provides training to BIA employees and employees of federally recognized Tribes. There is no tuition cost for this training. Expenses for transportation, hotel accommodations, and meals are the responsibility of the participant. Training courses are available at the National Indian Programs Training Center (NIPTC) in Albuquerque, New Mexico and at various field locations. The training schedule is subject to change at the discretion of NGRC.

REGISTRATION

To enroll in a course, fax the completed registration form (Page 9) to (505) 563-5359. Due to the high demand for training, please register early to ensure placement in the requested course. Courses taught at the NIPTC in Albuquerque are filled on a first come, first served basis. Courses taught at field locations, hereafter also referred to as 'Tribal Field Training,' are filled in this order of priority: 1) Tribal employees from within the training location's BIA region; 2) BIA employees from within the training location's BIA region; and 4) BIA employees from outside the training location's BIA region.

- To register for a course a registration form must be completed for each course of interest. Only ONE course and ONE person per registration form. No registrations will be accepted over the phone. Please note the cancellation and absence policy.
- Confirmations are sent via fax approximately 4 weeks before the start of a course. Please do not make travel arrangements until enrollment confirmation is received.
- If we are unable to enroll you, a fax will be sent indicating that your name will remain on the waitlist for the course. Should space become available, you will be contacted by the registrars. This does not put you on the waitlist for other courses.
- Should contact information change, please contact NGRC registration at (505) 563-5355 or 877-293-9494 (NGRC Help Desk).
- Contractors for these entities and educators are ineligible for these services.

COURSE DESCRIPTIONS

ALL CLASSES WILL BE TAUGHT USING ARCGIS DESKTOP VERSION 9.3 UNTIL INSTRUCTOR CERTIFICATIONS FOR VERSION 10 BECOME AVAILABLE; TRAINING SCHEDULE WILL BE REVISED WHEN VERSION 10 TRAINING BECOMES AVAILABLE

GIS ORIENTATION (Course # 100)

This one-day orientation, developed by the NGRC, is designed for prospective hands-on GIS users and those who are or potentially will be directly supervising hands-on GIS users, who are not currently experienced in the use of GIS. The orientation provides an overview of GIS, GIS capabilities, and ESRI's ArcGIS Desktop software, including the opportunity for students to experience hands-on use of the software. Students should leave the orientation with a basic understanding of GIS, its capabilities, and its value to their business processes. They should also gain an understanding and realistic expectation as to what using and managing GIS requires, and an appreciation for the technical benefits and complexities of the ArcGIS Desktop suite of applications. The orientation is intended as a primer for further NGRC GIS training for those who will become GIS users, and to provide supervisors with an understanding of what GIS users in their charge face with regard to their development as GIS users.

Course Topics:

- Introduce GIS and demonstrate what it can do.
- Discuss components of GIS and how to get help with GIS.
- Work with basic ArcGIS symbology and labeling functions.
- Arranging a basic map layout.

PRE-REQUISITE: Students should know how to use Windows-based software.

ArcGIS DESKTOP I: Getting Started with GIS (Course # 101)

This three-day course provides the foundation for understanding what GIS is, what it can do, and how others are using it. Students learn the basic functions of a GIS, the properties of digital maps, why a GIS database is powerful, and what coordinate systems and map projections are and why they are important. This course also covers two common GIS data structures and where geographic data is obtained and how it is made. In course exercises, students work with ArcMap to visualize geographic data, create maps, query a GIS database, perform spatial analysis using simple analysis tools, and solve simple geographic problems using a systematic approach. This course is designed for those who are new to GIS and ArcGIS or those who are infrequent users of ArcGIS who do not have a background in GIS. This course serves as the first step in completing the ArcGIS Desktop 9.3 Foundational Training Curriculum and offers foundational training for ArcGIS Desktop II: Tools and Functionality. The ArcGIS 9.2 version of this course was titled Learning GIS Using ArcGIS Desktop, therefore students who have had that class will not be eligible for ArcGIS Desktop I until a period of one year has passed since taking the 9.2 version.

Note: The NGRC occasionally offers an ACCELERATED version of this course that is taught in two days. If you choose to sign up for the accelerated version of this course, please be aware that the pace will be RAPID as compared to the normal three-day format for this course.

Course Goals:

- Explain what a GIS is and what it can do
- Describe how GIS can help in their work.
- Work with and create digital maps in ArcMap.
- Access and query a GIS database.
- Explain what geographic data is, how it is made, and where to get it.
- Explain what spatial analysis is and solve geographic problems using simple analysis tools.

PRE-REQUISITE: Students should know how to use Windows-based software.

Please be advised of the Registration Priority policy for field training (Tribal Field Training) classes (see Page 6).

ArcGIS DESKTOP II: Tools and Functionality (Course # 102)

This four-day ESRI authorized course follows "ArcGIS Desktop I: Getting Started with GIS," continuing to expose students to the ArcGIS suite of software. Students learn how to use ArcMap and ArcCatalog, and further explore how these applications work together to perform common GIS tasks and workflows. This course teaches essential tools for visualizing, creating, managing, and analyzing geographic data. ***Note: The NGRC occasionally offers an ACCELERATED version of this course that is taught in three days. If you choose to sign up for the accelerated version of this course, please be aware that the pace will be RAPID as compared to the normal four-day format for this course.***

Course Goals:

- Identify which ArcGIS Desktop Application is used for certain tasks
- Understand what the geodatabase offers for GIS data storage
- Create and edit geodatabase features
- Control appearance and display of layers in ArcMap
- Classify and symbolize map data
- Label map features
- Change the coordinate system and map projection used to display a dataset
- Access feature information in tables and control table properties
- Query and analyze GIS data
- Create presentation-quality maps and graphs.

PREREQUISITE: Students must have completed either instructor-led ESRI authorized *ArcGIS Desktop I: Getting Started with GIS, Learning GIS Using ArcGIS Desktop,* or ESRI Web-based (Virtual Campus) *Learning ArcGIS 9.****Note: All students taking *ArcGIS Desktop II: Tools and Functionality* will be required to have completed one of the prerequisite options listed above.*** (this course description continued on next page)

This course serves as the second step in completing the ArcGIS Desktop 9.3 Foundational Training Curriculum and offers foundational training for *ArcGIS Desktop III: GIS Workflows and Analysis*. The ArcGIS 9.2 version of this course was titled *Introduction to ArcGIS I*.

Please be advised of the Registration Priority policy for field training (Tribal Field Training) classes (see Page 6).

ArcGIS DESKTOP III: GIS Workflows and Analysis (Course # 103)

This three-day ESRI authorized course follows "ArcGIS Desktop II: Tools and Functionality" and continues to present important concepts and functionality for creating an efficient GIS workflow. This course demonstrates how to apply ArcGIS tools in a workflow context with emphasis on working with the geodatabase and performing geoprocessing and analysis. ***Note: The NGRC occasionally offers an ACCELERATED version of this course that is taught in two days. If you choose to sign up for the accelerated version of this course, please be aware that the pace will be RAPID as compared to the normal three-day format for this course.***

Course Goals:

- Add data from difference sources to a geodatabase
- Work with subtypes to edit data
- Edit and validate feature geometry and attributes using geodatabase topology
- Run analysis tools using dialog boxes and models
- Build a complex model using ModelBuilder

PREREQUISITE: Students must have completed either instructor-led ESRI authorized *ArcGIS Desktop II: Tools* and Functionality or Introduction to ArcGIS I. ***Note: All students taking *ArcGIS Desktop III: GIS Workflows* and Analysis will be required to have completed one of the prerequisite options listed above.***

This course serves as the final step in completing the ArcGIS Desktop 9.3 Foundational Training Curriculum. The ArcGIS 9.2 version of this course was titled *Introduction to ArcGIS II*.

Please be advised of the Registration Priority policy for field training (Tribal Field Training) classes (see Page 6).

INTRODUCTORY DESKTOP I & II WORKSHOP (Course # 201)

The NGRC will offer a five-day training session that consists of two days of *ArcGIS Desktop I: Getting Started with GIS* followed by three days of *ArcGIS Desktop II: Tools and Functionality* (see individual course descriptions). This workshop is designed for students with little or no prior experience with GIS.

Note: The NGRC offers this five-day workshop covering two courses that are normally taught in a total of seven days when the two courses are taught separately. If you choose to sign up for this workshop, please be aware that the pace will be RAPID as compared to the pace of the two courses when they are conducted separately.

PREREQUISITE: While no prerequisite is required in order to take this workshop, students should know how to use Windows-based software.

Students enrolling in this training session are **required** to complete both training classes.

Please be advised of the Registration Priority policy for field training (Tribal Field Training) classes (see Page 6).

ACCELERATED DESKTOP II & III WORKSHOP (Course # 202)

The NGRC will occasionally offer a five-day training session that consists of three days of *ArcGIS Desktop II: Tools* and *Functionality* followed by two days of *ArcGIS Desktop III: GIS Workflows and Analysis*. It is recommended, but not required, that students have prior experience with ArcGIS with job-related project work. At a minimum, students must fulfill one of the required prerequisite options (see below).

Note: The NGRC offers this five-day workshop covering two courses that are normally taught in a total of seven days when the two courses are taught separately. If you choose to sign up for this workshop, please be aware that the pace will be RAPID as compared to the pace of the two courses when they are conducted separately.

Students enrolling in this training session are **required** to complete both training classes.

PREREQUISITE: Students must have completed either the ESRI authorized *ArcGIS Desktop I: Getting Started with GIS, or Learning GIS Using ArcGIS Desktop,* or ESRI Web-based (Virtual Campus) "*Learning ArcGIS 9*" to register for this workshop. ***Note: All students taking the "*Accelerated Desktop I & II Workshop*" will be required to have completed one of the prerequisite options listed above.***

Please be advised of the Registration Priority policy for field training (Tribal Field Training) classes (see Page 6).

WORKING WITH ArcGIS SPATIAL ANALYST (Course # 104)

This four-day course explores how vector & raster data can be integrated to provide a powerful analytical environment. It will involve raster concepts and shows how to use the Spatial Analyst tools for spatial models.

Course Goals:

- Understanding the raster data models
- Converting data to raster format
- Build raster databases
- Learn map algebra functions
- Learn distance modeling
- Interpolate surfaces from sample points
- Perform surface hydrology functions
- Image Georeferencing functions, and more

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PREREQUISITE: Students must have completed either the ESRI authorized *ArcGIS Desktop II: Tools and Functionality* or *Introduction to ArcGIS I.* ***Note: All students taking "Working With ArcGIS Spatial Analyst" will be required to have completed one of the prerequisite options listed above.***

RECOMMENDED: Students should have advanced working knowledge of ArcGIS or have completed either *ArcGIS Desktop III: GIS Workflows and Analysis* or *Introduction to ArcGIS II.*

Please be advised of the Registration Priority policy for field training (Tribal Field Training) classes (see Page 6).

MAP DESIGN WITH ArcGIS (Course # 105)

Map Design with ArcGIS is a four-day technical course, developed by the NGRC, and has an emphasis on the advanced techniques involved in effectively communicating the results of geospatial analysis through paper map production, as well as through a variety of digital representations. Areas discussed are design, layout, symbolization, color theory, text and annotation usage, and overall theme communication. The four day course format consists of delivery and discussion of lecture material, and detailed software exercises following each lecture topic. An additional highlight of the course is the interactive class critique of printed draft map versions and final digital map products produced in exercises. ***Note: The NGRC occasionally offers an ACCELERATED version of this course that is taught in three days. If you choose to sign up for the accelerated version of this course, please be aware that the pace will be RAPID as compared to the normal four-day format for this course.***

Course Goals:

- Conceptual map design and effective map communication
- Advanced color, symbology, and text concepts and application
- Achieving visual balance with effective map element arrangement
- Draft and final map product critique and output

PREREQUISITE: Students must have completed an instructor-led ESRI authorized course at a level no less than either *ArcGIS Desktop II: Tools and Functionality* or *Introduction to ArcGIS I.* ***Note: All students taking *Map Design with ArcGIS* will be required to have completed the prerequisite listed above; no exceptions can be made.***

RECOMMENDED: Students should have advanced working knowledge of ArcGIS or have completed either *ArcGIS Desktop III: GIS Workflows and Analysis* or *Introduction to ArcGIS II.*

BUILDING GEODATABASES (Course # 106)

Building Geodatabases is a three-day advanced ESRI-authorized course that focuses on the use of geodatabases in the ArcGIS environment. The geodatabase is the ESRI data model that allows features to be modeled more realistically than ever before. This course introduces the structure and capabilities of the geodatabase. You learn how to create a geodatabase, migrate existing GIS data to a geodatabase, and edit and maintain data stored in a geodatabase. In course exercises, you practice creating and applying geodatabase components that enforce data integrity.

This course is designed for experienced ArcGIS users who want to store and manage data in a geodatabase. Data managers will find this course of particular benefit.

PREREQUISITE: Students must have completed either the ESRI authorized *ArcGIS Desktop II: Tools and Functionality* or *Introduction to ArcGIS I.* ***Note: All students taking "Building Geodatabases" will be required to have completed one of the prerequisite options listed above.***

SUMMARY OF COURSE OFFERINGS

Course Offerings	Course Number	Description	# of Days	Pre- requisites	ESRI Authorized
GIS Orientation	100	One-day orientation for prospective hands-on GIS users and supervisors	1	NONE	
Desktop I: Getting Started with GIS	101	A basic course intended for those new to GIS or with little GIS experience	3**	NONE	✓
Desktop II: Tools & Functionality	102	A course for ArcGIS 9.3	4**	Desktop I	✓
Desktop III: Workflows & Analysis	103	A course for ArcGIS 9.3	3**	Desktop II	✓
Working with ArcGIS Spatial Analyst	104	Working with ArcGIS Spatial Analyst	4	Desktop II	✓
Map Design with ArcGIS	105	Advanced map design using ArcGIS	4**	Desktop II	
Building Geodatabases	106	Advanced Geodatabase functionality	3	Desktop II	✓
Introductory Desktop I & II Workshop	201	Combined Desktop I & II	5	NONE	✓
Accelerated Desktop II & III Workshop	202	Combined Desktop II & III	5	Desktop I	√

^{**} ACCELERATED versions of these courses are one day less in duration.

TRAINING AND REGISTRATION POLICIES

REGISTRATION PRIORITY

Courses taught at the National Indian Programs Training Center (NIPTC) in Albuquerque are filled on a first come, first served basis.

Courses taught at field locations, also referred to as 'Tribal Field Training,' are filled in this order of priority:

- 1) Tribal employees from within the training location's BIA region
- 2) BIA employees from within the training location's BIA region
- 3) Tribal employees from outside of the training location's BIA region
- 4) BIA employees from outside the training location's BIA region

COURSE PREREQUISITE

To fulfill a course PREREQUISITE, refer to the course description for the specific class that you want to sign up for. There are both instructor-led and ESRI Virtual Campus course (see below) options that fulfill course prerequisites. If the prerequisite is completed through venues other than the NGRC or is Web-based, a copy of your Certificate of Completion is required in order to enroll you in the class. It is preferred that a copy of the certificate accompanies your faxed course registration form (see Page 9), **but it is required that a copy be faxed to the registrars no later than 4 weeks prior to the start of the course**.

Failure to complete the pre-requisite will result in the denial of enrollment.

ESRI VIRTUAL CAMPUS COURSES

ESRI Web-based, standard subscription, Virtual Campus GIS courses and workshops are now available, at no cost, through the current Enterprise License Agreement (ELA) between ESRI and the Department of the Interior (DOI). For more information please look online at http://www.bia.gov/WhatWeDo/ServiceOverview/Geospatial/index.htm, on the BIA Intranet at http://ngrc.indianaffairs.gov, or contact the BIA Service Center Help Desk at (866) 703-7100 and state that you have a GIS training question.

CANCELLATION and ABSENCE

Due to the high demand for training, the NGRC has implemented a Cancellation and Absence Policy.

Cancellation Policy

If you are unable to attend a course for which you are registered, the NIPTC registrars must receive your cancellation a minimum of ONE (1) week before the start of the course for which you are registered. Failure to give adequate notice of cancellation may result in the **denial of your registration** for other courses for a period of one year. If you need to cancel a course you are registered for, please contact the registration at (505) 563-5355 or 877-293-9494 (NGRC Help Desk).

Absence Policy

Failure to attend a course for which you have been accepted may result in the **denial of your registration** for other courses for a period of **one year**. Suspension letters will be faxed to absentees.

SCHEDULE RELEASE

It is the practice of the NGRC to schedule training classes in response to feedback received from the Tribal/BIA user community. It is important that both training held at the NIPTC and field training classes extend to serve those interested in GIS training throughout all of the BIA regions. Thus for a calendar training year, every effort is made to schedule classes at locations in as many of the regions as possible. Once the schedule has been approved, some flexibility must remain to allow for adjustments. Therefore, it is the policy of the NGRC to release the upcoming schedule of classes on a semi-annual basis, releasing the schedule for a given half-year by the beginning of the previous quarter. You may look for schedule updates by the beginning of the quarter prior to the start of classes for that given schedule. You can find the schedule(s) online at http://www.bia.gov/WhatWeDo/ServiceOverview/Geospatial/index.htm or on the BIA Intranet at http://ngrc.indianaffairs.gov.

April - September 2011 TRAINING SCHEDULE

ALL CLASSES WILL BE TAUGHT USING ARCGIS DESKTOP VERSION 9.3 UNTIL INSTRUCTOR CERTIFICATIONS FOR VERSION 10 BECOME AVAILABLE; TRAINING SCHEDULE WILL BE REVISED WHEN VERSION 10 TRAINING BECOMES AVAILABLE

NATIONAL INDIAN PROGRAMS TRAINING CENTER

Albuquerque, New Mexico

ArcGIS Desktop I: Getting Started with GIS (3-day course)

June 28 - 30, 2011

ArcGIS Desktop II: Tools and Functionality (4-day course) (see PREREQUISITE policy, Pages 2 and 6)

April 26 – 29, 2011	
August 2 – 5, 2011	

ArcGIS Desktop III: GIS Workflows and Analysis (3 days) (see PREREQUISITE policy, Pages 3 and 6)

May 24 – 26, 2011
August 29 – 31, 2011

Working with ArcGIS Spatial Analyst (4-day course) (see PREREQUISITE policy, Pages 4 and 6)

September 13 – 16, 2011

TRIBAL FIELD TRAINING

Please review the Registration Priority policy on Page 6. If you have registration questions, call (505) 563-5355 (NGRC Help Desk).

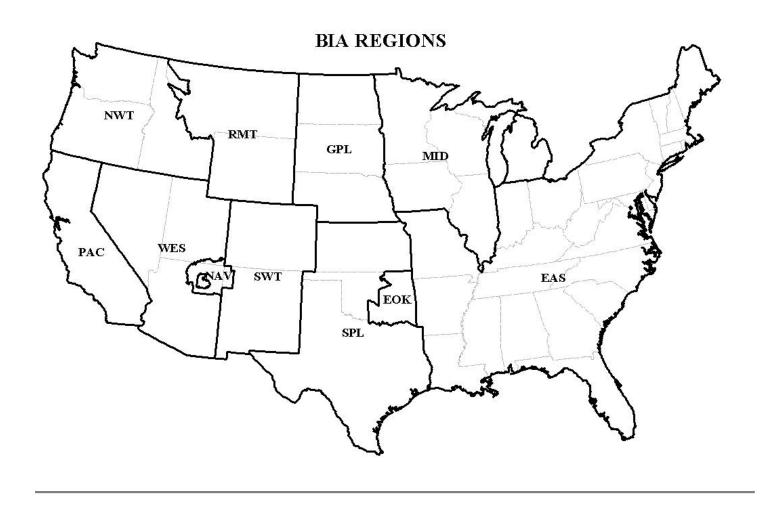
Region / Field Location	Course Offered	Date	
EOK/BIA-Eastern OK Agency Pawhuska, OK	Introductory Desktop 1 & 2 Workshop	April 18 – 22, 2011	
NWT/BIA-Northwest Regional Office, Portland, OR	ArcGIS Desktop I: Getting Started with GIS	May 11 – 13, 2011	
AK/Sun'aq Tribe of Kodiak, Kodiak Island, AK	Accelerated Desktop 2 & 3 Workshop*	June 13 – 17, 2011	
GPL/Lower Brule Sioux Tribe Lower Brule, SD	ArcGIS Desktop I: Getting Started with GIS	July 18 – 20, 2011	
NWT/Yakama Nation Toppenish, WA	Map Design w/ArcGIS*	July 25 – 28, 2011	
MID/BIA – Great Lakes Agency Ashland, WI	ArcGIS Desktop I: Getting Started with GIS	August 23 – 25, 2011	
SWT/Ute Mountain Ute Tribe Towaoc, CO	Introductory Desktop 1 & 2 Workshop	September 19 – 23, 2011	

^{*} Course has a prerequisite

Questions? Please call the BIA Service Center Help Desk - (866) 703-7100, Option #4

(Be sure to tell the Help Desk representative that you have a GIS training question)

BUREAU OF INDIAN AFFAIRS REGIONAL MAP



ABOUT THE INSTRUCTORS

R. J. Kern

R. J. Kern is an ESRI Authorized Instructor and has served the Bureau of Indian Affairs since 2005. ESRI recognized R. J. as a "Top 5 Performer" from 2005-2008. R. J. received his B.A. in Environmental Geography and Art & Art History from Colgate University and a M.A. from the Department of Geography, University of Colorado-Boulder. He served in the map division of the National Geographic Society for five years.

Karl Seitz

Karl Seitz is an ESRI Authorized Instructor, who comes to the NGRC with over a dozen years of GIS experience, and substantial experience with training and teaching in a variety of education-related contexts. He specializes in the instruction of ESRI's ArcGIS Desktop, training both at the NIPTC in Albuquerque and at various field locations throughout the BIA regions. In 2007 and 2009, ESRI recognized Karl as a "Top 5 Performer" among authorized instructors. In addition to GIS, he has a background in archaeology and geography, completing a B.A. in Geography and Anthropology at the University of Arizona (Tucson) in 2001, and an M.A. in Geography at Arizona State University (Tempe) in 2005.



NATIONAL GEOSPATIAL RESOURCE CENTER COURSE REGISTRATION FORM



The National Geospatial Resource Center (NGRC) is a provider of GIS training to BIA central, regional and agency offices, and employees of federally recognized Tribes. Contractors for these entities are ineligible for these services, unless compacted with a Tribe or Native Village. To register for a course a registration form **must** be completed for each course of interest. **Only ONE course** and ONE person per registration form. Fax the completed registration form to the NGRC, Attn: Registrar at (505) 563-5359.

Confirmations are sent via fax approximately 4 weeks before the start of a course. Please do not make travel arrangements until enrollment confirmation is received.

All applicable fields must be filled in completely or delays in enrollment will occur.

Course Name:						Course Date:	
Course Location:						Course Number:	
Fir	st Name	Mr./Ms.					
Last Name							
	Title						
Employment Af (BIA or		☐ Tri	bal 🗌 BIA	Tribe of I BIA Agen			
Dep	artment						
BIA Region Emp	loyed In						
Other Organizatio	n Name						
Compacted with	Tribe?	□Yes	s No	Company	Name:		
Mailing or F	Address P.O. Box						
City, S	tate Zip						
Physical A (if different from I							
City, St	ate, Zip						
Email .	Address						
Web Site Addre	ess/URL						
	Phone	()				Ext.
	Fax	()				
Previous GIS 7	raining						
Supervisor's A Signature (r							
Supervisor's Printe and Phone	Number	Name				Phone:	
<u>Prerequisite Policy:</u> If the prerequisite is completed through venues other than the NGRC or is Web-based, a Certificate of Completion is required. It is preferred that a copy of the certificate accompanies this form, but it is required that a copy be faxed to the registration no later than 4 weeks prior to the start of the course. Failure to complete the prerequisite will result in the denial of enrollment.							

Cancellation and Absence Policy: Due to the high demand for training, the NGRC has implemented a Cancellation and Absence policy. If you are unable to attend a course for which you are registered, the registrars must receive your cancellation a minimum of ONE week before the start of the course for which you are registered. Failure to give adequate notice of cancellation or failure to attend a course for which you are accepted may result in the denial of your registration for other courses for a period of one year. If you need to cancel a course you are registered for, please contact NGRC registration at 505-563-5355 or 877-293-9494 (NGRC Help Desk).